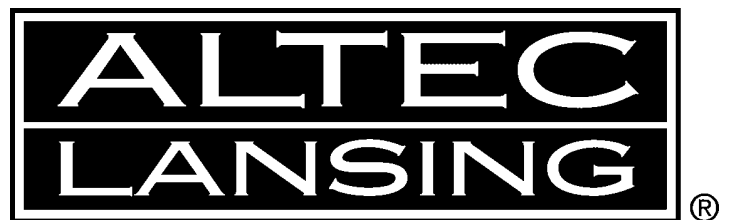


ADA880



RF Breakthrough Advisory

If this product is placed too close to a high level source of RF energy, RF breakthrough may be experienced which can cause some audio disturbance. If this happens, move the product as far away as possible from the source until the disturbance is eliminated. Using an audio input cable with a high percentage of shielding is also helpful in reducing or eliminating interference.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

SAFETY INSTRUCTIONS

Read Instructions — All the safety and operating instructions should be read before the appliance is operated.

Retain Instructions — The operating instructions should be retained for future reference.

Heed Warning — All warnings on the appliance and in the operating instructions should be adhered to.

Follow Instructions — All operating and use instructions should be followed.

Water and Moisture — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

Outdoor Use — Warning: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

Location — The appliance should be installed in a stable location.

Ventilation — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a closed bookcase or cabinet that may impede the flow of air through the ventilation openings.

Heat — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

Power Sources — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

Power-Cord Protection — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

Grounding or Polarization — The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.

Cleaning — The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzene, insecticides or other volatile liquids since they may corrode the cabinet.

Non-Use Periods — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

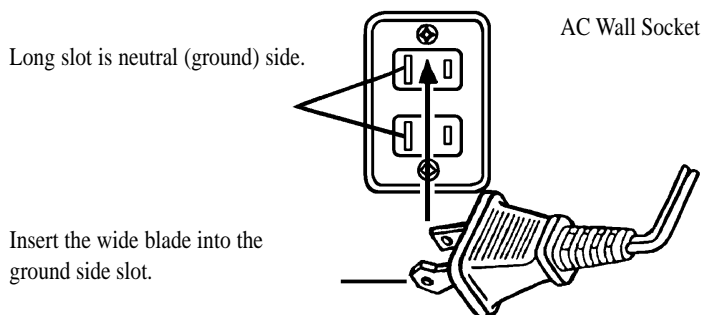
Object and Liquid Entry — Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

Damage Requiring Service — The appliance should be serviced by qualified service personnel when:

- The power-supply cord or the plug has been damaged.
- Objects have fallen, or liquid has been spilled into the appliance.
- The appliance has been exposed to rain.
- The appliance does not appear to operate normally or exhibits a marked change in performance.
- The appliance has been dropped or the enclosure damaged.

Servicing — The user should not attempt to service the appliance. Servicing should be referred to qualified service personnel or returned to the dealer or call the Altec Lansing service line for assistance.

Connecting the Power Cord



CAUTION: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

The FCC Wants You to Know

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and

on, the user is encouraged to try to correct the interference by one or more of the following measures:

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- d) Consult the dealer or an experienced radio/TV technician or help.

FCC Warning

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

Introduction

The ADA880 is a technologically advanced multimedia amplified speaker system featuring Dolby Digital AC3 and Dolby Pro-Logic surround sound and stereo reproduction. The amplifier inputs can simultaneously operate on analog and digital (S/PDIF)* audio signals.

The unit is comprised of a subwoofer and two satellite speakers. This combination provides surround sound on a desktop by utilizing side firing speakers. For enhanced surround sound the top speaker portion of each satellite can be separated and placed on a provided stand with long speaker wires. This enables the separated speakers to be placed for best surround sound performance. Equalizer circuitry automatically resets to conform to the changes that take place when the speakers are separated.

The satellite speakers are magnetically shielded and can be placed close to a monitor without disturbing images. The speaker in the subwoofer is not magnetically shielded and should not be placed close to a monitor.

Subwoofer frequencies are non directional, therefore, the subwoofer does not have to be located in any particular relationship to the satellite speakers. Placing it on the floor close to a wall, corner of a room or under a desk gives excellent results.

The main satellite speaker has status indicators to show the various conditions of operation. A master volume control is used to separately adjust bass, center, surround and treble settings. Once the individual functions are set, the control reverts back to becoming a master volume control. A remote control unit is supplied that can access all the manual functions. The remote control has a mute function that is not available when using the controls manually.

The AC3/PRO-LOGIC/STEREO decode circuits operate automatically. If the unit is in the STEREO or PRO-LOGIC mode and an AC3 signal appears at the input of the amplifier, the circuitry automatically switches over to AC3. This and other automatic features are explained under "Using the Speaker System."

If analog and digital signals appear at the input of the amplifier, the analog signal is automatically reduced in volume level.

*Sony/Philips Digital Interconnect Format.

SPECIFICATIONS

System Response	20Hz – 20kHz
Total Audio Output	80 Watts
Input Impedance	>10k Ohms
Analog Input Sensitivity	300mV for full output
Digital Input	S/PDIF*

SATELLITE AMPLIFIED SPEAKERS

Drivers	Four 3" full range Two 1" Tweeters
Power	40 Watts (10 watts per driver) at .10% THD
Signal-to-Noise Ratio	>70dB

SUBWOOFER

Driver	One 8" dual voice coil
Power	40 watts at 1% THD
Crossover Frequency	150Hz
Signal-to-Noise Ratio	>70dB

POWER REQUIREMENTS

USA/Canada	120V/240W/60Hz
Europe/United Kingdom and various Asian countries	230V/240W/50Hz
UL/CU/CE Approved	

DIMENSIONS

Subwoofer	345mm Wide X 290mm Deep X 235mm High
Main Speakers	102mm Wide X 130mm Deep X 155mm High
Surrounds	120mm Wide X 105mm Deep X 108mm High

*Sony Philips Digital Interconnect Format

Setup

Do not plug the AC power plug into the wall outlet until all connections are made.

The ADA880 can be setup in two configurations. For ENHANCED SURROUND sound a 5-piece setup is used. For near field STEREO/SURROUND sound a 3-piece setup is used. The two modes of operation are described below. The speakers are packaged and shipped in the 5-piece arrangement. Follow the instructions and pictorial view below to make the 5-piece connections.

Enhanced Surround Sound Operation (See Figure 1)

- 1) Connect the left and right satellite speakers.

Notice that the DIN connectors from the left and right satellite speakers are color-coded and plug into the matching color indicators on the back of the subwoofer. Also note that the connectors have arrows. These arrows should face up as shown in Figure 1.

- 2) Connect the left and right surround speakers.

The left (yellow) and right (purple) surround speaker connectors are plugged into the corresponding colored inputs on the back of the subwoofer.

- 3) Connect the subwoofer to the computer.

The green color-coded wire connects the ANALOG INPUT on the subwoofer to the AUDIO OUTPUT on the computer.

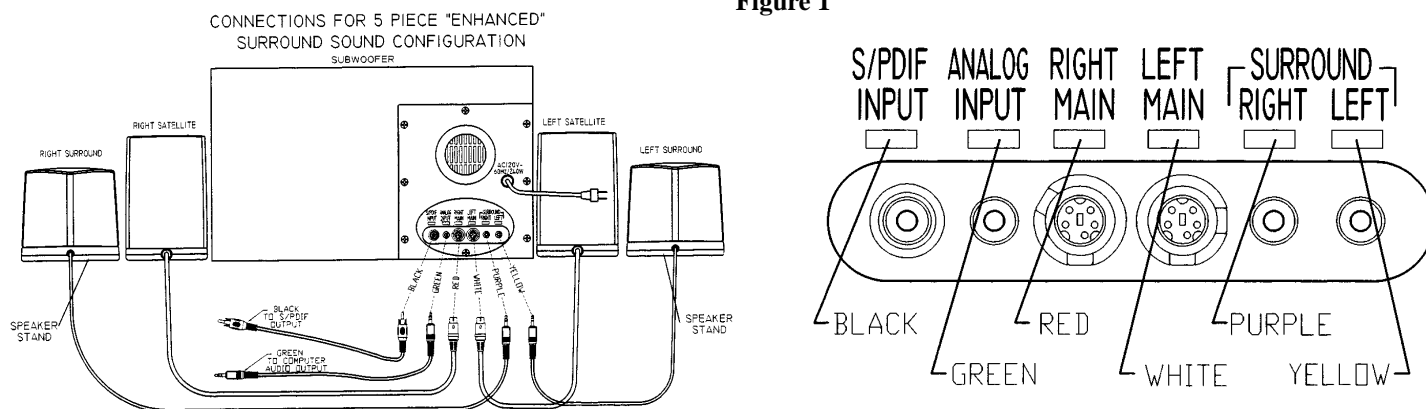
The black RCA type plug is used to connect the S/PDIF INPUT on the subwoofer to a DVD player.

- 4) Plug the AC power plug into the wall outlet.

The ADA880 unit should be installed close to the AC power outlet so that the power plug can be readily removed from the outlet in the event of a hazardous problem.

Your ADA880 system is now ready for use.

Figure 1



Near Field Stereo/Surround Sound Operation (see Figures 2 and 3)

If it is desired to convert to a 3-speaker system, follow the instructions and the pictorial view below.

- 1) Separate the left and right surround speakers from their stands by gently pulling the speaker up (See Figure 2)

- 2) Remove the left (yellow) and right (purple) speaker wires from the subwoofer.

(Set speaker stands aside for future use)

- 3) Remove the supplied rubber plugs from the top of the satellite speakers.

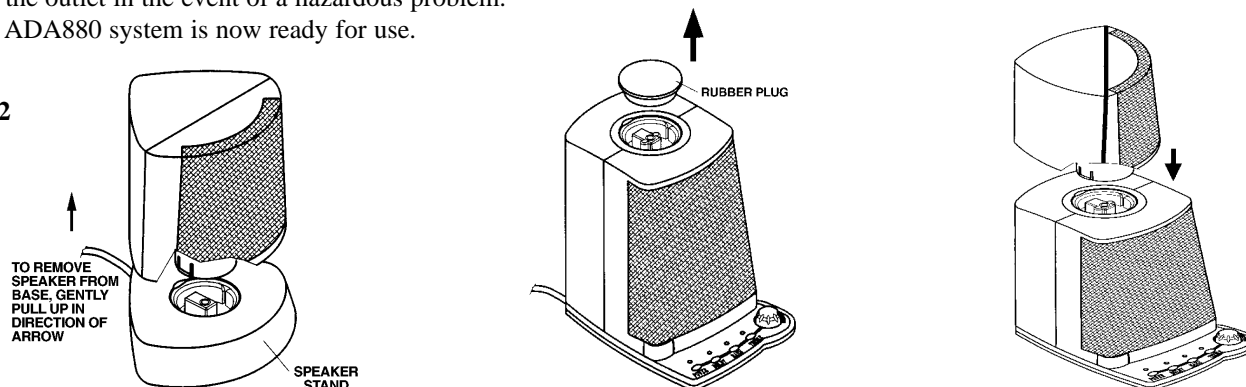
- 4) Mount the surround speakers on top of the satellite speakers as shown in Figure 2.

(The connections to the satellite speakers are made automatically once the surround speakers are mounted)

The ADA880 unit should be installed close to the AC power outlet so that the power plug can be readily removed from the outlet in the event of a hazardous problem.

Your ADA880 system is now ready for use.

Figure 2



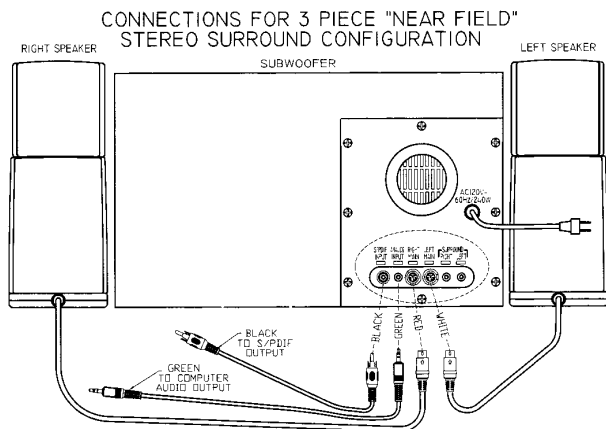
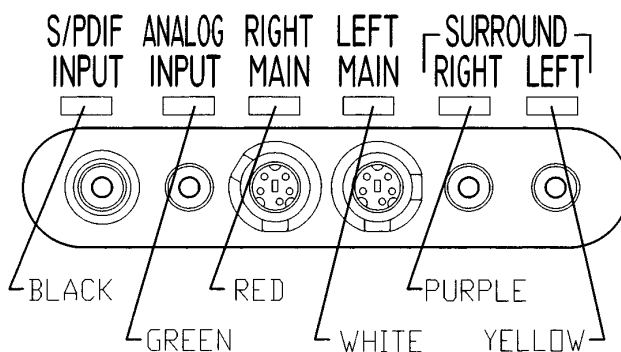


Figure 3



Placement of Speakers (See Figures 4 and 5)

All stereo information is heard from the satellite and surround speakers. The subwoofer contains no stereo information and its sound is non-directional. As a result, the subwoofer does not necessarily have to be placed in any particular relationship to the satellites. Placing the subwoofer on the floor close to a wall or corner of a room provides maximum bass efficiency. The subwoofer is not magnetically shielded and should not be placed near video displays.*

Near Field

The satellite and surround speakers are magnetically shielded and can be placed close to the computer monitor without distorting video images. Best stereo effect is obtained by placing the speakers as far apart as practical.

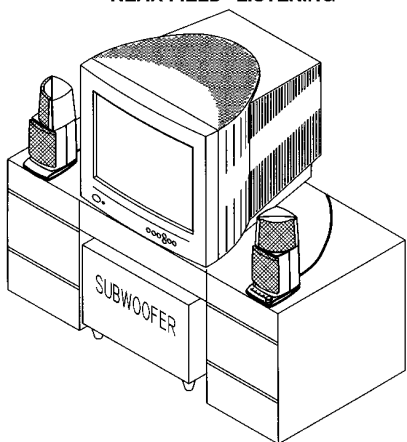
Enhanced Surround Sound

Best surround effect is obtained by placing the surround speakers forward of the monitor and approximately the same distance apart as the satellite speakers. Excellent results are obtained when the surround speakers are in line with, and slightly above the listeners ears.

*Note: Care should be taken not to place diskettes or other magnetic media on the subwoofer.

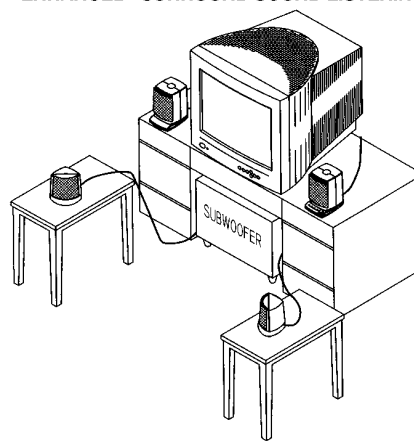
**TYPICAL ARRANGEMENT FOR
"NEAR FIELD" LISTENING**

Figure 4



**TYPICAL ARRANGEMENT FOR
"ENHANCED" SURROUND SOUND LISTENING**

Figure 5



Using the Speaker System (See Figure 6)

***POWER.** Press this button to turn power on. A green indicator will glow. Press again to turn power off.

DOLBY. The DOLBY button allows 2 modes of operation – STEREO or SURROUND. Repeatedly pressing this button toggles between the two modes.

See A) B) C) below.

A) STEREO. When the function indicator is off: the unit is in the STEREO mode.

B) SURROUND. When the function indication is amber the unit is in the SURROUND PRO-LOGIC mode.

C) DOLBY DIGITAL (AC3). When the function indicator is green: The unit is in the DOLBY DIGITAL (AC3) mode. This function is selected automatically whenever a Dolby Digital Surround Signal is detected at the input. The automatic selection will occur regardless of the mode of operation, STEREO or SURROUND.

*Note: If the AC source of power is turned off before the power switch is turned off on the unit a "pop" sound may be heard from the speakers. This is normal and not a problem. To avoid the "pop" sound, turn off the unit first.

BASS. The BASS button allows 2 modes of operation: BASS level control or CENTER level control.

See D) and E) below.

D) **BASS LEVEL CONTROL.** The bass level control is accessible in all modes of operation. If it is desired to increase/decrease BASS response, press this button. The green function indicator above the control will glow. Also, the volume level indicators will glow showing the last setting of the control. Rotate the master volume control clockwise to increase bass and counter clockwise to decrease bass. Only 6 of the 7 level indicators are operational in this mode. As volume is increased/decreased only one level indicator at a time will glow in ascending or descending order. As the volume control is varied and passes through the flat response setting of the control, the 2 center indicators will glow. (This is the equivalent of a manual volume control set at center detent indicating flat response.)

E) **CENTER LEVEL MODE.** This function is only operational in the SURROUND mode. Hold the BASS button depressed until the function indicator begins flashing on/off. Rotate the master volume control clockwise to increase the center volume and counterclockwise to decrease center volume. The green volume level indicators will glow in ascending order as volume is increased and will turn off in descending order as volume is decreased.

TREBLE. The TREBLE button allows 2 modes of operation, TREBLE level control or SURROUND level control.

See F) and G) below.

F) **TREBLE LEVEL CONTROL.** The treble level control is accessible in all modes of operation. If it is desired to increase/decrease TREBLE response, press this button, the green function indicator above the control will glow. Also, the volume level indicators will glow showing the last setting of the control. Rotate the master volume control clockwise to increase treble and counter clockwise to decrease treble. Only 6 of the 7 volume level indicators are operational in this mode. As volume is increased/decreased only one level indicator at a time will glow in ascending or descending order. As the volume control is varied and passes through the flat response setting of the control the 2 center indicators will glow. (This is the equivalent of a manual volume control set at center detent indicating flat response.)

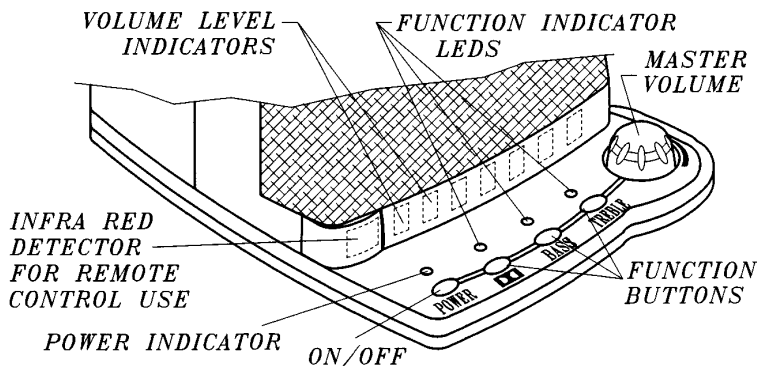
G) **SURROUND.** This function is only operational in the SURROUND mode. Hold the TREBLE button depressed until the function indicators begin flashing on/off. Rotate the master volume control clockwise to increase the surround volume and counter-clockwise to decrease the surround volume. The green volume indicators will glow in ascending order as volume is increased and will turn off in descending order as volume is decreased.

MASTER VOLUME CONTROL. The MASTER VOLUME CONTROL provides two functions. It operates as a master volume control for the overall system and can also be used to individually adjust the volume levels of BASS, CENTER, TREBLE and SURROUND. If any one of the functions is selected and is not adjusted within a few seconds, the control reverts back to becoming a master volume control.

FLAT RESPONSE SETTINGS. To set the BASS and TREBLE controls to a flat response (default) and the CENTER and SURROUND controls to mid volume level positions, both the BASS and TREBLE buttons must be depressed at the same time. Initially the function indicators above the buttons will be green. The buttons must be kept depressed until the indicators turn off. The amplifier response is now flat (linear). If it is desired to increase/decrease BASS or TREBLE response press either of these buttons respectively. Two volume level indicators will glow in the middle of the display indicating the flat response of the amplifier. Notice that the volume level display has changed from 7 to 6 indicators. Rotate the volume control clockwise to increase levels and counter-clockwise to decrease levels from the flat setting.

To access CENTER and SURROUND volume level settings, the unit must be in the SURROUND mode. Press either the BASS or TREBLE button until the function indicator flashes. Four volume level indicators will glow showing mid setting. Adjust the volume control clockwise to increase volume level from the mid setting and counter-clockwise to decrease volume level from the mid setting. All volume level indicators are operational in this mode.

Figure 6



Remote Control Operation (See Figure 7)


The remote control can perform most of the manual operations. For best performance aim the front part of the control towards the infrared detector as shown in Figure 6. Below are listed the functions of the control.

Figure 7

POWER. Press this button to turn power on. The power indicator on the satellite will glow. Press again to turn power off.

TREBLE. Press this button if it is desired to adjust the TREBLE level. The function indicator above the TREBLE button on the satellite will glow. To increase/decrease volume, press the up/down arrows on the VOL button. The volume level indicators will glow in ascending order as volume is increased and will turn off in descending order as volume is decreased.

BASS. Press this button if it is desired to adjust the BASS level. The function indicator above the BASS button on the satellite will glow. To increase/decrease volume, press the up/down arrows on the VOL button. The volume level indicators will glow in ascending order as volume is increased and will turn off in descending order as volume is decreased.


STEREO. Press this button to operate in the STEREO mode. The indicator above the  DOLBY button on. The satellite will be off in this mode.

MUTE. This function is only available when using the remote control. Press this button to mute the sound. The volume level indicators will turn off. The power and function button indicators remain on. Press this button again to restore sound.

Press any other function (except power) and sound will be restored.

CENTER. This function is only operational in the SURROUND mode. Press this button to adjust the volume level of the center channel. The green function indicator above the BASS button on the satellite will flash on/off. Set the center level by using the up/down volume control (VOL). The green volume indicators will glow in ascending order as volume is increased and will turn off in descending order as volume is decreased.

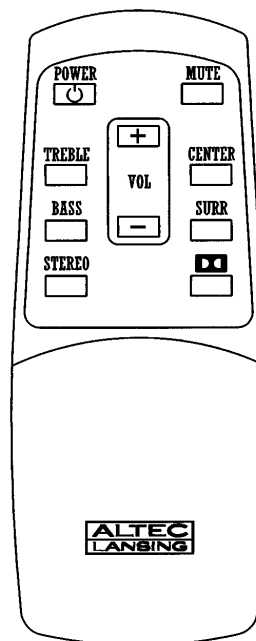
SURR(SURROUND). This function is only operational in the surround mode. Press this button to adjust the volume level of the SURROUND PRO-LOGIC mode. The green function indicator above the treble button on the satellite will flash on/off. Set the surround level by using the up/down volume control (VOL). The green volume level indicators will glow in ascending order as volume is increased and will turn off in descending order as volume is decreased.

 **DOLBY.** The DOLBY button allows 2 modes of operation - STEREO or SURROUND.

(A)STEREO. When the function LED is off on the satellite, the unit is in the STEREO modes.

(B)SURROUND. When the amber function LED is on the satellite, the unit is in the surround PRO-LOGIC mode.

(C)DOLBY DIGITAL (AC3). When the function LED is green on the satellite, the unit is in the DOLBY DIGITAL (AC3) mode. This function is selected automatically whenever a Dolby Digital surround signal is detected at the input. The automatic selection will occur regardless of the mode of operation, STEREO or SURROUND.



ADA880 Troubleshooting

Symptoms	Possible Problem	Solution
All indicators are off	AC Cord is not connected to wall outlet	Connect AC power
	Control Speaker is not connected to the subwoofer	Connect control speaker to subwoofer
	Power is off	Press power button or use remote to turn on the system
No Sound from all Speakers	Power is not on	Verify the AC line cord is plugged into the wall outlet Verify power switch has been pressed (green Power LED is lit)
	Volume setting is too low	Raise master volume control
	S/PDIF cable is not connected to DVD playback card	Connect S/PDIF cable
	Signal cable is disconnected from sound card	Connect signal cable
	Right (Control) speaker is disconnected	Connect right (Control) speaker
Mute turns off unexpectedly	Mute was re-pressed or a function was selected	System will un-mute whenever the mute button is pressed again, if a function button is pressed, or if the volume control is rotated
Subwoofer emits very loud humming/buzzing noise	Signal cable is not completely inserted into signal jack on subwoofer	Make sure cable is inserted snugly into signal jack
No sound from Subwoofer	Subwoofer volume is too low	Select Bass function and raise volume level
		Press and hold Treble and Bass buttons for 3 seconds to reset Treble, Bass, Center, and Surround levels to default position.
No sound from surround speakers	Unit is not in a surround mode	Press the mode button to select a surround mode. Prologic – Amber Dolby Digital – Green
	Surround level is too low	Select surround level function and raise volume
		Press and hold Treble and Bass buttons for 3 seconds to reset Treble, Bass, Center, and Surround levels to default position
Center and Surround buttons do not work	Unit is not in a surround mode	Press the mode button to select a surround mode. Prologic - Amber Dolby Digital - Green
No sound from surround speakers when detached	Surround bases are not connected	Connect surround bases to rear of subwoofer
	Unit is not in a surround mode	Press the mode button to select a surround mode. Prologic - Amber Dolby Digital - Green
	Surround level is too low	Select surround level function and raise volume
		Press and hold Treble and Bass buttons for 3 seconds to reset Treble, Bass, Center, and Surround levels to default position
No playback from digital input	Digital signal cable is not connected	Connect digital signal cable to S/PDIF output of DVD playback card
Sound is distorted	Volume level too high	Decrease master volume level
Not enough treble	Treble setting is too low	Select Treble function and increase level
		Press and hold Treble and Bass buttons for 3 seconds to reset Treble, Bass, Center, and surround levels to default position
Too much treble	Treble setting is too high	Select Treble function and decrease level
		Press and hold Treble and Bass buttons for 3 seconds to reset Treble, Bass, Center, and surround levels to default position
Too much bass	Bass setting is too high	Select Bass function and decrease level
		Press and hold Treble and Bass buttons for 3 seconds to reset Treble, Bass, Center, and surround levels to default position
Remote Control does not work	Batteries are dead or not installed	Replace or install new batteries
	Remote is not pointed at speakers	Point remote control at the left side of LED bar
	Remote signal path is blocked	Removed any object that is blocking the signal from the remote to the left side of the LED bar